

From: Hicks, Faison  
Sent: Thu 7/8/2010 9:25 AM  
To: fletcherh@ncleg.net; F Hartsell  
Cc:  
Subject: Statements of Alcoa's V.P., Mr. O'Rourke, to Senator Hartsell's Committee -- "Fact Check"

Dear Senator Hartsell:

During the Senate Judiciary II Committee's meeting/hearing on Tuesday, you asked Alcoa Vice-President William J. O'Rourke the question whether Alcoa possesses any epidemiological studies showing a high incidence of Kidney and/or Bladder Cancer in employees of Alcoa's Badin plant, as compared to the population as a whole. (Transcript of the July 6, 2010 hearing of the Senate Judiciary II Committee ["Hearing Transcript"], at page 50)

Mr. O'Rourke unqualifiedly stated that the answer to this question is "no." (Hearing Transcript at page 50: "We do not.")

Mr. O'Rourke identified himself as the Vice President of Environmental Health and Safety for Alcoa Corporation, such that the answer to your question should be well within his field of expertise and knowledge.

Among the documents that Mona Wallace gave me on Monday is an internal Alcoa document dated July 11, 1996 that was written by someone named Kathy Lang. (Note that this document is not subject to any protective order or other limitations on its use by third parties.) This document, which appears to be an email message, was addressed to nine (9) Alcoa officials. One of those Alcoa officials is Mr. William J. O'Rourke.

Assuming that I am reading this Alcoa document correctly, it appears to concern Alcoa's internal debate over and its ultimate determination of the issue whether it should advise its former employees of their risks of developing Kidney Cancer as a result of their exposure to certain carcinogens (specifically, aliphatic hydrocarbons) at work and, if so, what Alcoa should say to its former employees about the degree of this cancer risk.

This document states that, for people who have worked at Alcoa for one year or less and whose jobs exposed them to high levels of "Aliphatic Hydrocarbon[s]" (this is a type of hydrocarbon that is referred to generally as PAHs and/or coal tar pitch volatiles), the risk (what Alcoa referred to as the "Odds Ratios") of developing Kidney Cancer are 3.70 times the normal rate of incidence of Kidney Cancer in the population as a whole. It is my understanding that coal tar pitch volatiles are discharged into the air at Alcoa's Aluminum smelting plants, and that they were at the old Badin plant before Alcoa closed it down.

This document also seems to state that this type of carcinogen exposure is not "dose responsive." This means that a person who is exposed to high levels of Aliphatic Hydrocarbons over a relatively short period of time is just as likely to develop Kidney Cancer as someone who has been exposed to high levels of this carcinogen continuously over many years.

This document evidences a debate within Alcoa's internal "health and safety team" over whether Alcoa could get away with advising its former workers that their risk of developing Kidney Cancer as a result of their exposure to Alcoa's coal tar pitch volatiles was 2.52 times the normal rate or 3.70 times the normal rate. After much discussion of this issue, Alcoa's health and safety team agreed that "we would be leaving ourselves open to embarrassment and

criticism if we use the 2.5 x rate rather than the original hypotheses (3.5 x).” [I don’t understand why the 3.70 figure was reduced to 3.50.]

Hence, Alcoa decided to use the 3.5 x rate in its communications to its former employees, but it also decided to minimize the seriousness of this elevated risk factor in its comments to its former employees by stating or implying that the Kidney Cancer study which found that the risk was 3.5 x the normal risk was a “flawed study,” that the study involved “poor data quality” and that the study involved “old unused processes,” etc.

I believe that this document clearly shows that Mr. O’Rourke’s answer to your question on Tuesday during your Committee meeting (as set forth at the beginning of this email message) was not factual. That is, this Alcoa document clearly shows that Alcoa does, in fact, possess epidemiological studies or reports indicating that there is or was a higher-than-normal risk of Kidney Cancer for Alcoa’s employees or former employees. Indeed, this document specifically refers to a “Kidney Cancer study.”

In addition to this Alcoa document, Mona Wallace also gave me a 68-page document on Monday (which is also not subject to any protective order or other limitation on its use by third parties) that is a detailed bio-statistical study conducted by Howard E. Rockette, Ph.D., and Vincent C. Arena, Ph.D., both of the University of Pittsburg (which I understand from Mona Wallace is heavily endowed and supported by Alcoa). Mona has given me to understand that Dr. Rockette was one of Alcoa’s primary scholarly researchers for its cancer studies until he came out with this or another cancer study and then refused to back away from certain of its findings. According to Mona, at or about that time, Dr. Rockette ceased to be an active Alcoa researcher.

This 68-page Rockette study states that it was paid for by Alcoa. Dated August 19, 1993, this study is entitled “Case-Control Study of Kidney Cancer and Hydrocarbon Exposure in the Aluminum Industry.”

By way of background, the study states that:

In March 1990, a Proportionate Mortality Study was completed of 6373 deaths occurring in one of 37 Alcoa plants from 1980-1987. One of the goals of the original study was to provide a general assessment of mortality across all Alcoa plants and to identify potential problems requiring further research.

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[This March 1990 study showed that] the mortality from Kidney Cancer was 58% higher than expected.

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The present [August 19, 1993] study is a follow-up to this previously reported Proportionate Mortality Study and its purpose was to investigate whether the excess [mortality from Kidney Cancer] was due to occupational exposure [to carcinogens]. One hypothesized cause of an excess of Kidney Cancer was exposure to some form of hydrocarbon. The

primary purpose of the present study was to test the hypothesis of an association of Kidney Cancer and hydrocarbon exposure.

Thus, in just its first few pages, this 68-page document clearly states that Alcoa does, in fact, possess one or more studies or reports indicating that there is or was a higher-than-normal risk of Kidney Cancer for Alcoa's employees or former employees. This risk rate was "58% higher than expected."

In addition, the "Summary" of this August 19, 1993 Rockette study also clearly shows that Alcoa possesses other studies and reports showing that its Aluminum smelting workers are at much higher-than-normal risk that they will develop Kidney Cancer due to their work-related exposure to various carcinogens (primarily hydrocarbons).

Here are some excerpts from Dr. Rockette's Summary of his August 19, 1993 study:

- Those Aluminum industry workers from 1980 to 1990 who had a "high exposure to hydrocarbons" had a risk of developing Kidney Cancer that was 2.55 times greater than those Aluminum industry workers whose exposure to hydrocarbons was not high (defined as less " $p < .05$ ");
- Those Aluminum industry workers from 1980 to 1990 who had "jobs classified as low or medium exposure [to hydrocarbons] did not have a significant excess risk [of developing Kidney Cancer];" and
- The significantly elevated risk of developing Kidney Cancer experienced by those workers who had a high exposure to hydrocarbons at work "remained after adjustment for non-occupational factors such as smoking, analgesic use and obesity."

This study also made clear that, where an Aluminum worker experienced high exposure to hydrocarbons just once or a few times, he or she was just as likely to develop Kidney Cancer as someone who has been heavily exposed to hydrocarbons over the course of many years. Put another way, this type of carcinogen exposure is not "dose responsive."

This Alcoa study specifically included Aluminum workers at the Badin, North Carolina smelting plant. The same is true of the March 1990 Alcoa study referred to by Dr. Rockette's 68-page study in its Summary. It is clear from this document that Alcoa was studying and tracking the risks of various cancers for its workers at most, if not all, of its American smelting plants. Thus, Alcoa can tell you from its own research what the elevated Kidney Cancer risks are for its Aluminum workers at most, if not all, of its American Aluminum smelting plants – which is directly contrary to what Mr. O'Rourke told you on Tuesday at your Committee's meeting (see question and answer above).

Finally, Dr. Rockette's August 19, 1993 study states that "[o]n August 19, we became aware of some errors in the exposure classification given to us by Alcoa. This could have a major impact on the results [of this study], but there was insufficient time to incorporate these changes in classification into the report."

In other words, Alcoa gave the researchers faulty data which the researchers believed might have materially altered their research findings.

If I am correctly reading Alcoa's July 11, 1996 email from Kathy L. Lang to, among others, Mr. O'Rourke (see the first part of this email message above), it appears to me that, in July 1996, Alcoa's top health and safety team members, including Mr. O'Rourke himself, decided that, due to this error in the 1993 study's data (data provided by Alcoa to its researchers), Dr. Rockette's cited risk factor of 2.5 times the normal Kidney Cancer rate had to be upgraded to 3.5 times the normal, lest Alcoa leave itself "open to embarrassment and criticism if we use the 2.5 x rate rather than the original hypotheses (3.5 x)."

Again, it seems clear to me from this Alcoa document that Mr. O'Rourke's statement to your Committee on Tuesday that Alcoa does not possess Kidney Cancer studies was not factual. It is unclear to me how Mr. O'Rourke could not have known this fact, given his job title and responsibilities (as he explained them on Tuesday) and given that he is a recipient of the July 11, 1996 report summarized in my email message below.

Please let me know if you have any questions.

Faison